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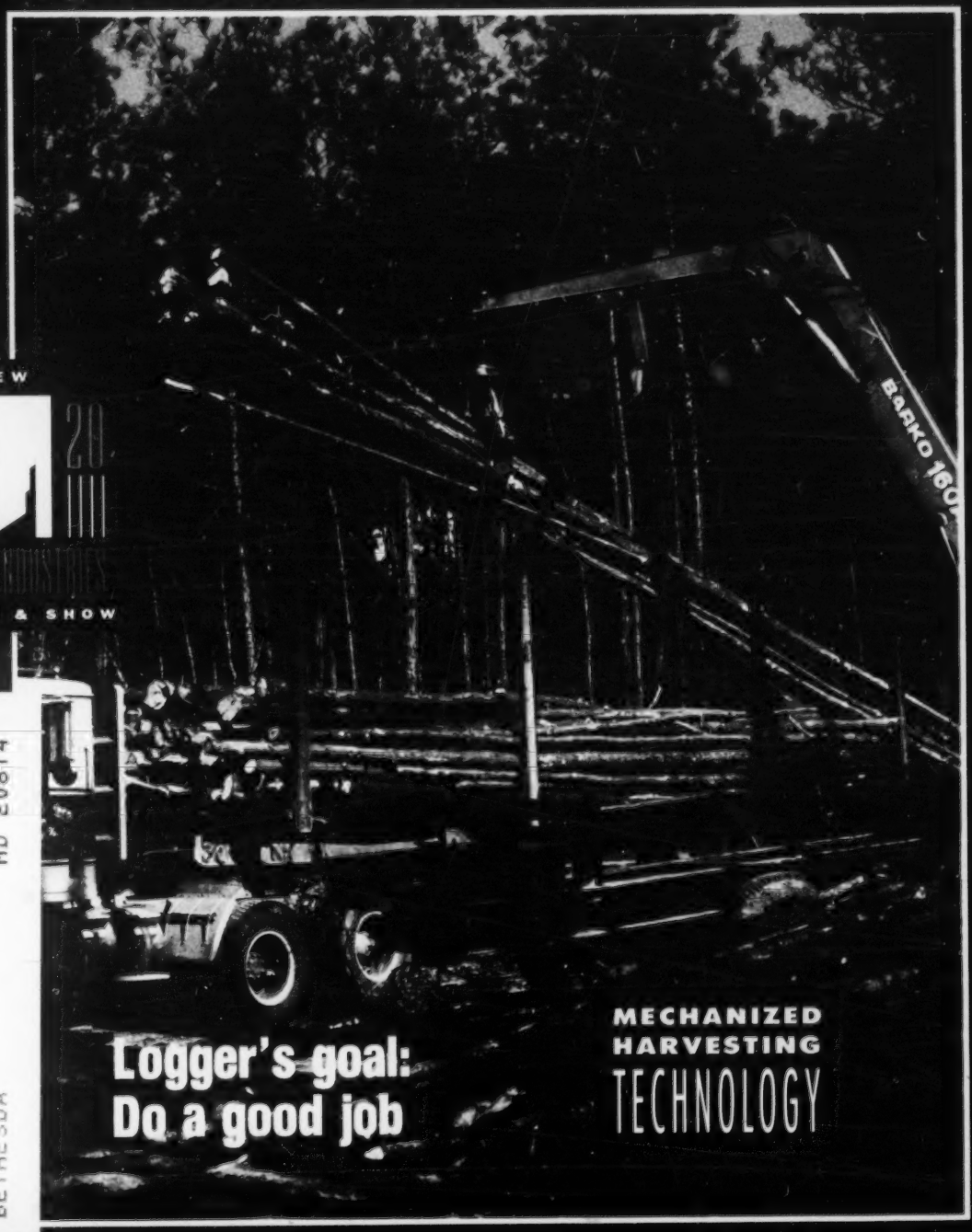

PREVIEW

20 FOREST INDUSTRIES CLINIC & SHOW

Logger's goal: Do a good job

MECHANIZED HARVESTING TECHNOLOGY

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JAN/FEB 1992

FOREST INDUSTRIES

NEWS

5 **Few surprises found among top 1990 lumber producers** FOREST INDUSTRIES' exclusive survey of producers showed Weyerhaeuser Co. retained first place

7 **Owl habitat cut as 'God Squad' convenes** The northern spotted owl can survive with 6.9 million acres of preserved forest habitat, says the U.S. Fish and Wildlife Service

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13 **'Our goal is to do a good job, then worry about production'** Virginian logger M.M. Wright takes APA 'logger of the year' title for 1991. His goals are to earn a good reputation and build landowners' trust

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20 **Mechanized logging to expand** Increased machine capabilities, increased volumes of smaller timber extend applications of whole-tree and cut-to-length harvest systems

23 **Product Review: Mechanized Harvesting Technology** A sampling from suppliers showcases current technology in the field of felling machines and attachments

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VOLUME 119 NUMBER 1

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Few surprises found among top 1990 lumber producers

A year of painstaking work to rank North America's major lumber producers yielded few surprises. Weyerhaeuser Co. retained—by a considerable margin—the title of North America's biggest sawmiller.

Second and third places on the list, compiled by FOREST INDUSTRIES editors after an exclusive survey of companies throughout the United States and Canada, produced a flip-flop. Georgia-Pacific Corp.—third in 1989—overtook Louisiana-Pacific Corp. for second place. G-P's 2.66 billion bd ft of lumber cut in 1990 was well behind Weyerhaeuser's 2.92 billion. L-P cut nearly 2.2 billion bd ft in dropping from second in 1989 to third in 1990.

The largest Canadian lumber producer, Canfor Corp., retained its fourth-place rank in both 1989 and 1990. It's worth noting that Canfor produced 1.43 billion bd ft in only 11 mills. Louisiana-Pacific had 56 sawmills operating in 1990, followed by Georgia-Pacific with 46 and Weyerhaeuser with 35.

Fifth was another Canadian, Weldwood, which churned out 1 billion bd ft in only eight sawmills. WTD Industries' 23 mills cut 996 million bd ft to take sixth place in the survey.

Rounding out 1990's top 10 were West Fraser Timber (993 million bd ft), Sierra Pacific Industries (967 million), International Paper Co. (880 million) and Fletcher Challenge Canada (863 million).

Yes, the numbers are for 1990, not 1991. It takes most producers some time to report figures from all of their mills, so the annual survey is always a year behind. Typically, the 1991 survey accounted for a little more than 80% of 1990's estimated total softwood and hardwood lumber output in North America—nearly 69.3 billion bd ft.

The survey is just part of the wealth of information found in *Forest Industries 1991-92 North American Factbook*—more than 350 pages of information about the solid-wood industry. The volume provides production data for more than 750 lumber producers, and capacity and production figures for major panel producers (structural and nonstructural) in both countries.

You can order the $157 *Factbook* by phone, fax or mail. Call 408/848-5296; fax 408/848-5784; write to FOREST INDUSTRIES Books, P.O. Box 7339, San Francisco, Calif. 94120-7339. Mention order number 483.

Factbook survey data revealed output declines among the largest sawmillers. North America's top 100 companies in 1990 cut a combined 41.6 billion bd ft of softwood and hardwood lumber, about 5.5% less than in 1989. And only five companies cut more than 1 billion bd ft, compared to nine in 1989.

The 100th-largest producer's volume has also fallen, from more than 128 million bd ft in 1987 and 1988 to 115 million in 1990.

The 100 largest sawmillers cut 60% of all lumber produced in North America in 1990. This number shows two things: a relatively small number of companies cut a dominant share of the continent's lumber—but there are plenty of small independents whose combined market share is large.

FOREST INDUSTRIES' survey covered 765 lumber producers. We know there are hundreds more, most of them small mills. Our goal was to get reports from mills with annual output as low as 1 million bd ft. Several of the individual sawmills in the survey cut more than 200 times as much. ■

Top 20 producers, U.S. and Canada

Company name & headquarters	# of mills	1990 production (million bd ft)	Rank in 1989
1. Weyerhaeuser Co. Tacoma, Wash.	35	2,921	1
2. Georgia-Pacific Corp. Atlanta, Ga.	46	2,664	3
3. Louisiana-Pacific Corp. Portland, Ore.	56	2,199	2
4. Canfor Corp. Vancouver, B.C.	11	1,431	4
5. Weldwood of Canada Ltd. Vancouver, B.C.	8	1,011	9
6. WTD Industries Inc. Portland, Ore.	23	996	7
7. West Fraser Timber Co. Ltd. Vancouver, B.C.	8	993	8
8. Sierra Pacific Industries Redding, Calif.	9	967	10
9. International Paper Co. Purchase, N.Y.	11	880	12
10. Fletcher Challenge Canada Ltd. Vancouver, B.C.	8	863	6
11. Champion International Corp. Tacoma, Wash.	9	819	16
12. MacMillan Bloedel Ltd. Vancouver, B.C.	9	796	13
13. Boise Cascade Corp. Boise, Idaho	15	783	11
14. Slocan Forest Products Ltd. Richmond, B.C.	7	680	15
15. Westar Timber Ltd. Vancouver, B.C.	5	626	20
16. Doman Industries Duncan, B.C.	7	619	21
17. RSG Forest Products Inc. Kalama, Wash.	5	604	14
18. Northwood Pulp & Timber Ltd.* Prince George, B.C.	5	598	5
19. Donohue Inc. Quebec, Que.	8	595	17
20. Pope & Talbot Inc. Portland, Ore.	5	586	22

* Northwood Pulp & Timber 1990 production was included under parent company Noranda Forest Inc.
NOTE: Companies are ranked according to data gathered by FOREST INDUSTRIES.

One log unloading crane does the job of two

Progress Industries Inc. has introduced a 175-ft, 20-ton log crane for two-bite tree-length log unloading. The new crane allows storage of over 12,000 cords, enabling it to do the job of two smaller cranes and resulting in reduced maintenance, storage and manpower. Progress Industries also manufactures crane models in lengths of 75, 100 and 125 ft, plus 150-ft, 20-ton and 150-ft, 45-ton models. **Progress Industries Inc.** Circle No. **28**

Swamp skidder

The Ronen track swamp skidder is based on the firm's track swamp harvester which has been in production for over four years. The 210-hp skidder has a high ground clearance of 36 in. and high-flotation, 36-in. x 15.5-ft tracks. It has been purpose-built for swamp skidding using an economical and rugged D-6 size bulldozer tractor undercarriage. A front high-elevated final drive system has good weight distribution and fewer final drive and sprocket problems from operating in mud and water.

With a high front-track approach angle, the skidder has a climbing action instead of a burrowing tendency in soft ground conditions such as conventional designs have. It features proven components for durability and easy maintenance. Ronen's swamp skidder is available in a high-ground, mountainous model, and can come with different model grapples or a knuckleboom loader and clambunk. **Ronen Manufacturing.** Circle No. **29**

Grade mark reader

UIP-Forestline has recently installed an Intellescan Custom Classic grade mark reader at Boise Cascade's White City, Ore., pine mill. The reader features nine-color grader tracking complete with color management report; push-button interface for trimmer console hook-up; custom programming for cut-in-two, cut-outs and scale-off; and parameter changes for on-line adaptation, maintenance and troubleshooting.

"All parties are extremely pleased with the system's operation and flexibility," the company reports. **United Industrial Products Ltd.** Circle No. **30**

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FOREST INDUSTRIES

NEWS

5 **Lujan, courts conflict over owl management in NW** Dealing with the northern spotted owl in Pacific Northwest forests took a couple of new—but confusing—turns in February

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13 **Technology takes aim at small-log processing** Innovative Biewer Wisconsin Sawmill in Prentice, Wis., uses optimizers and a dual carriage system for fast breakdown

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21 **Panels slide again; upturn seen for '92** Producers weathered tough markets last year, which in most cases returned output to mid-'80s levels; optimism tied to housing rebound

24 **Quebec plant marks 'first' by making LVL from hardwood** Temlam Inc., Ville Marie, Que., became North America's first LVL plant to use hardwood as its raw material

27 **Area's harvests depend on machine owner-operators** Small subcontractors form the backbone of logging work in Quebec's Temiscaming region

29 **Recycling, new products will help cut fiber use** But wood demand will increase in proportion to the population explosion, calling for professional forest management

32 **Low-cost sawmill updating raised production** Higher yield, faster production paid for modernization of Etablissements Guy Neurisse mill in Castets, France

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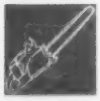
PANEL REVIEW '92

SHOW DIGEST



CHAIN SAWS

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Panels slide again; upturn seen for 1992

U.S. producers weathered tough markets last year, which in most cases returned output to mid-1980s levels; optimism tied to housing rebound

Sources agree 1992 should be a turnaround year for the wood-based panel industry in the United States, which saw production and shipment figures slip in 1991 for the second year in a row. Numbers were down in all major product categories.

The good news to be extracted from this scenario is that the downward movement was relatively modest, ranging from 1% for medium-density fiberboard to 8% for structural panels. Figures in the table below draw a 10-year profile. In summary:

- Production of structural panels (softwood plywood, oriented strand board, waferboard and oriented waferboard) dropped 8% in 1991 to an estimated 24.3 billion ft² (⅜-in. basis), continuing a slide that began after a record level of 27.2 billion ft² was attained in 1988. The rate of decline rose in 1991 from 0.6% in 1990.
- Particleboard shipments in 1991 slid 6% to an estimated 3.57 billion ft² (¾-in. basis). The record of 3.86 billion ft² was set in 1989, although shipments also exceeded 3.8 billion ft² in 1988 and 1990. The decline is becoming more precipitous: 1990 shipments were a little over 1% below the 1989 level.
- MDF is almost a growth industry by comparison. Shipments in 1991 edged downward 1% to an estimated 940 million ft² (¾-in. basis) after dropping 2% the year before. The record year for MDF shipments also was 1989; shipments have exceeded 900 million ft² since breaching that mark in 1988.
- Hardboard shipments dropped below 5 billion ft² (⅛-in. basis) in 1991 for the first time in over a decade. Estimated shipments slipped 3% to 4.9 billion ft², after also declining 3% the year before. Shipments have tumbled since the record of 7.3 billion ft² was set in 1983.

Structural panels

While the structural panel industry found itself in a slightly deeper hole last year than predicted (the American Plywood Assn. was looking for 25 billion ft², ⅜-in. basis, at this time in 1991), past and current projections agree that an upturn will occur in 1992.

The APA is estimating production this year will reach 26.5 billion ft², based on housing starts of 1.15 million units. This will be an increase of 9%, bringing output back to levels typical of those in 1989 and 1990.

While structural panel consumption in the average single-family home has increased in a decade from 5600 to 8433 ft², APA president Bill Robison is quick to point out the industry doesn't have all of its eggs in the housing basket. Markets which are exclusive of new residential construction have grown to represent over 63% of struc-

U.S. panel production, 1982-1991 (thousand ft²)

Year	Structural panels (⅜-in. basis)	Particleboard[1] (¾-in. basis)	MDF[1] (¾-in. basis)	Hardboard[1] (⅛-in. basis)
1991[2]	24,300,000	3,570,000	940,000	4,890,400
1990	26,337,188	3,806,018	949,915	5,025,326
1989	26,490,320	3,858,226	970,001	5,195,651
1988	27,202,822	3,829,021	938,717	5,117,857
1987	27,001,000	3,705,560	899,282	5,457,508
1986	25,632,830	3,602,757	780,598	5,822,328
1985	22,838,170	3,330,517	684,593	6,300,146
1984	21,967,917	3,195,586	633,974	6,837,118
1983	20,821,342	3,009,343	604,323	7,302,702
1982	16,402,554	2,393,066	446,157	5,586,918

[1] Shipments; [2] Estimated. SOURCES: American Plywood Assn., National Particleboard Assn., American Hardboard Assn.

tural panel consumption in the United States.

Growth in all market areas is predicted for 1992, but the anticipated recovery in housing is critical to the turnaround expected by the structural panel industry. If APA expectations are met, new residential construction will grow 16% to 8.6 billion ft^2. Addition of 430 million ft^2 expected to be consumed in mobile home fabrication brings the projected 1992 residential total to 9.1 billion ft^2, an increase over 1991 of 15%.

Projected 1992 structural panel consumption in other markets is penciled out this way: remodeling, up 7% to 4.8 billion ft^2; industrial, up 2% to 6 million ft^2; nonresidential construction, up 1% to 3.85 billion ft^2; distribution, up 4% to 2.5 billion ft^2; and exports, up 15% to 1.6 billion ft^2.

APA market development activities continue to focus on offshore targets. Seven APA panel mills and three American Wood Systems glulam plants have received Japanese government approval to apply the Japan Agricultural Standard (JAS) mark on their production.

Super House will be complete in the fall. Funded by the Foreign Agriculture Service, U.S. Department of Agriculture, the project was organized by the Alliance for Wood Products Exports, which assigned responsibility for construction to APA.

Two other international demonstration projects are underway in Spain: California Village, a townhouse development, and the American Spirit Home, to be part of the United States pavilion at the World's Fair in Barcelona.

Particleboard and MDF

Information from the National Particleboard Assn. indicates future capacity increases in these industry segments will be less than suggested in this report a year ago. Two new mills originally scheduled for startup in 1993 have been put on an indefinite project hold: Mill's Pride Inc., Waverly, Ohio, particleboard, 68 million ft^2 (¾-in. basis) annual capacity, and Reincorp International Inc., Washington County, Ala., MDF, 100 million ft^2 (¾-in. basis) annual capacity.

Two other mills are on schedule, and another has been completed. Willamette Industries Inc.'s new 100 million-ft^2 MDF plant at Bennettsville, S.C., is on line. Paris Fiber Inc., Paris, Tenn., should be operational in late 1992 with a 90 million-ft^2 MDF facility. Masonite Corp. division of International Paper Co. is scheduled to begin construction of an additional particleboard line at Waverly, Va., in 1993, with startup in 1994. The project will add 100 million ft^2 to annual capacity.

Hardboard

Hardboard industry leaders are bullish on 1992 opportunities, looking for a good rebound in housing starts, reported American Hardboard Assn. executive vice president C. Curtis Peterson. Continued low mortgage rates, election year incentives and backed-up demand for housing and consumer products will contribute to the anticipated improvement, Peterson said.

AHA responded to the slump in 1991 by launching an expanded promotion program. The program consisted of advertising and promotion activities in support of a hardboard "home of the year" competition.

Hardboard siding shipments in 1991 were off 5% from the year before, totaling 2.9 billion ft^2 (⅛-in. basis). ■

Panel output levels decline in Canada

CANADIAN PRODUCTION of wood-based panels fell sharply last year. Estimates from Statistics Canada, based on 11-month totals, show construction plywood output for the year dropped 13% to 1.7 million m^3, equal to about 1.9 billion ft^2 (⅜-in. basis).

Waferboard and OSB production plummeted 19% to 1.6 million m^3 (about 898 million ft^2, ¾-in.) and particleboard skidded 8% to just over 1 million m^3 (about 590 million ft^2, ¾-in. basis).

This curtailment occurred after production the previous year declined about 10% in all three categories. Construction plywood production in 1991 fell to its lowest point since the housing collapse of the early 1980s. Plywood output exceeded 2 million m^3 in 1987 through 1989 and was only slightly below that mark in 1980. Figures recorded by the other two segments of the industry were typical of mid-1980s performance.

Canadian panel production, 1984-91 (m^3)

Year	Const. plywood	Particleboard	Waferboard/OSB
1991[1]	1,722,346	1,046,349	1,588,218
1990	1,971,541	1,146,018	1,965,827
1989	2,165,356	1,279,414	2,159,961
1988	2,161,658	1,213,364	1,646,663
1987	2,229,000	1,355,107	1,607,171
1986	1,876,896	1,139,253	1,347,638
1985	1,957,887	1,047,500	1,336,566
1984	1,846,369	843,346	1,190,254

[1] Estimated. SOURCE: Statistics Canada

The softwood plywood industry continued to feel "the sharp sting of the world economic recession" in 1991, according to the Council of Forest Industries of British Columbia. COFI's 11 member mills account for nearly three-quarters of Canada's softwood plywood production.

COFI mills reported declines in both domestic and export shipments for the second year in a row. Canadian shipments, at 1.3 billion ft^2 (⅜-in. basis), dropped 15%; export shipments of 258 million ft^2 were off a less-severe 4% from the 1990 mark.

Although the United Kingdom retained its position as the largest export market for COFI plywood, shipments to that market declined 11% and were barely ahead of Japan, now the fastest-growing export market for COFI plywood. Shipments to Japan in 1991 leaped 20% to 73 million ft^2 (⅜-in. basis).

"It has been another tough year for our industry," observed Peter Metcalfe, COFI plywood market development manager. "But despite the impact of two plant closures, the COFI plywood sector is poised to take advantage of any upturn in construction activity in Canada.

"There's an increasing focus on product improvement and development, on COFI quality brand recognition and on targeting our strategies more directly toward markets where COFI plywood's quality and features are demanded," he said. ■

EVENTS

APRIL

20-23—Log Imports and Introduced Forest Pests into the Pacific Northwest, Oregon State University, Corvallis, Ore. Conference Assistant, 503/737-2329.

22-24—Forest Farmers Assn. conference and annual meeting, Callaway Gardens Inn, Pine Mountain, Ga. FFA, 404/325-2954.

23-25—Mid-Atlantic Woodworking & Furniture Supply Show, Atlantic City, N.J. Trade Shows, 704/459-9894.

24-25—Northeastern Loggers' Congress & Equipment Exposition, Bass Park Complex, Bangor, Maine. George Mitchell, Northeastern Loggers' Assn., 315/369-3078.

30-May 1—Forest Sector, Trade and Environmental Impact Models, University of Washington, Seattle. 206/685-2315.

MAY

4-6—Wood Technology Short Course, Virginia Tech, Blacksburg. Fred Lamb, 703/231-7256.

6-7—Marketing Forest Products of the Pacific Rim, Fundacion Chile Conference Center, Santiago, Chile. Jay Gruenfeld Associates, 206/242-3551.

7—Hardwood Markets: the Export Alternative, Clement Center, Hickory, N.C. Larry Jahn, North Carolina Cooperative Extension Service, 919/515-5579.

7-9—Prince George Regional Forest Exhibition, Exhibition Park, Prince George, B.C. Trudy Swann, 604/563-8833.

11-13—Wood Finishing Seminar, Grand Rapids, Mich. Daniel Cassens, Purdue University, 317/494-3644.

13-15—Western Dry Kiln Assn. annual meeting, Harrah's Hotel, Reno, Nev. Charles J. Kozlik, 503/681-9125.

14-15—Electric Technologies for Drying of Wood, SUNY College of Environmental Science and Forestry, Syracuse, N.Y. 315/470-6891.

15-16—Expo Richmond '92, Virginia State Fairgrounds, Richmond, Va. 804/737-5625.

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